# 503109841 12/19/2014 PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3156450

		NEW ASSIGNM	ENT	
NATURE OF CONVEYANCE: ASSIGNMENT				
CONVEYING PARTY DA	ΑΤΑ	•		
		Name		Execution Date
EDWARD J. WOO				12/14/2014
JUAN A. MUNOZ				10/28/2014
NATALIYA V. FEDORO\	/A			12/16/2014
MARK W. ORLANDO				10/29/2014
CHARLES J. STUDINEF	RIV			10/29/2014
NICHOLAS B. MANOR				10/29/2014
RECEIVING PARTY DA	ТА			
Name:	3M INN	OVATIVE PROPERTIE	ES COMPANY	
Street Address:	P.O. B	X 33427		
City:	ST. PA	IL		
State/Country:	MINNE	OTA		
Postal Code:	55133-	427		
PROPERTY NUMBERS	Total: 1			1
Property Type	Total: 1	Numbe	r	
	Total: 1	<b>Numbe</b> 4409763	r	]
Property Type Application Number:			r	
Property Type		4409763	r	
Property Type Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be</i>	ATA e sent to	4409763 651)736-3833 <b>the e-mail address fi</b>	rst; if that is un	] successful, it will be sent
Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p	ATA e sent to provideo	4409763 651)736-3833 <b>the e-mail address fi</b> <b>if that is unsuccess</b>	rst; if that is un	
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Property Type Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email:	ATA e sent to provideo	4409763 651)736-3833 <b>the e-mail address fi</b> <b>if that is unsuccess</b> 51-733-1500 kweber@mmm.com	rst; if that is un ful, it will be sei	nt via US Mail.
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Property Type Application Number: CORRESPONDENCE D Fax Number: <i>Correspondence will be</i> <i>using a fax number, if p</i> Phone: Email: Correspondent Name: Address Line 1: Address Line 4:	ATA e sent to provideo	4409763 651)736-3833 <i>the e-mail address fi</i> <i>if that is unsuccess</i> 51-733-1500 kweber@mmm.com M INNOVATIVE PRO O BOX 33427	rst; if that is un ful, it will be ser PERTIES COMF	nt via US Mail.
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Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1: Address Line 4: ATTORNEY DOCKET NU NAME OF SUBMITTER:	ATA e sent to provideo	4409763 651)736-3833 <b>the e-mail address fi</b> <b>if that is unsuccess</b> 51-733-1500 kweber@mmm.com M INNOVATIVE PRO O BOX 33427 ST. PAUL, MINNESOT 67960US007	rst; if that is un ful, it will be ser PERTIES COMF A 55133-3427 DHNSON	nt via US Mail.
Property Type Application Number: CORRESPONDENCE D Fax Number: Correspondence will be using a fax number, if p Phone: Email: Correspondent Name: Address Line 1:	ATA e sent to provideo	4409763 651)736-3833 <b>the e-mail address fi</b> <b>if that is unsuccess</b> 551-733-1500 kweber@mmm.com M INNOVATIVE PRO O BOX 33427 67960US007 67960US007 SHERRI K.W. JC	rst; if that is un ful, it will be ser PERTIES COMF A 55133-3427 DHNSON	nt via US Mail.

**Total Attachments: 6** 

PATENT

REEL: 034558 FRAME: 0054

503109841

#### DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

Case No:

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

ABRASIVE ARTICLE			
The specification of which:	stand and a stand an		
is attached hereto;			
was filed on as United States Application No.			
is identified as PCT International Application No. filed on May 30, 2013	PCT/US2013/043209		

The above-identified application was made or authorized to be made by me.

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than 5 years, or both.

In addition, for good and valuable consideration, receipt of which is acknowledged, I have agreed to assign and transfer and do hereby assign and transfer unto the 3M INNOVATIVE PROPERTIES COMPANY, a wholly-owned subsidiary of 3M COMPANY, and a corporation of Delaware, having its principal office at Saint Paul, Minnesota, its successors and assigns, the entire right, title, and interest in and to the said invention and application, and in and to any division or continuation (in whole or in part) of said application, and in and to any and all improvements in the said invention made by me or made jointly with others (provided any such improvement is made during, or within one year after the termination of, my employment with 3M COMPANY and any of its existing or future subsidiaries), and in and to any and all Letters Patent, reexaminations, reissues, or extensions thereof, of the United States of America and countries foreign thereto (including the right to apply for Letters Patent, Utility Models, or Inventors' Certificates in foreign countries in its own name and to claim any priority rights for such foreign applications to which such applications are entitled under international conventions, treaties, or otherwise), which have been or may be granted thereon or on any divisional, continuation (in whole or in part), renewal, reexamination, reissue, or other or further application based in whole or in part upon the said invention or improvements thereon, to be held and enjoyed as fully and exclusively as they would have been by me had this assignment and transfer not been made;

I do further agree for myself and for my heirs, executors, and administrators, to execute and deliver without further consideration any further applications, assignments, and documents, and to perform such other acts as I lawfully may, that may be deemed necessary by said Company, its successors, assigns, and nominees, fully to secure its right, title, and interest as aforesaid and to obtain or maintain Letters Patent, Utility Models, or Inventors' Certificates in any and all countries; and

I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Legal Name of Inventor: Edward J. Woo	
Inventor's Signature:	Date: ノ み ー 1 4 ー 1 4

DECLARATION AND ASSIGNMENT,
FOR UTILITY OR DESIGN
PATENT APPLICATION (37 CFR § 1.63)

Case No:

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### **ABRASIVE ARTICLE**

The	specification of wh	ich:			
	is attached hereto	, ¢			
	was filed on as United States A	Application No.	]		
$\boxtimes$	is identified as PC filed on	T International Application No. May 30, 2013		PCT/US2013/043209	

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I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Legal Name of Inventor: Juan A. Munoz				
Inventor's Signature:	Date:			
	ý ¥			

DECLARATION AND ASSIGNMENT,
FOR UTILITY OR DESIGN
PATENT APPLICATION (37 CFR § 1.63)

Case No:

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

	ABRASIVE ARTICLE			
The	specification of which:			
$\Box$	is attached hereto;			
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I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Legal Name of Inventor:	
Nataliya V. Fedorova	
Inventor's Signature	Date:
I I I	12-16-14

#### DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)

Case No:

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

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The specification of which:

is attached hereto;

filed on

as United States Application No.

is identified as PCT International Application No.

May 30, 2013

PCT/US2013/043209

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I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Legal Name of Inventor:	
Mark W. Orlando	
Inventor's Signature:	Date:
moon Orlando	Catober 29, 2014

DECLARATION AND ASSIGNMENT, FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR § 1.63)	Case No:	67960US007

As a below named inventor, I believe I am an original inventor or an original joint inventor of a claimed invention in the application and for which a patent is sought on the invention entitled:

## **ABRASIVE ARTICLE**

The	specification of which:		
	] is attached hereto;		
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$\boxtimes$	is identified as PCT International Application No.	PCT/US2013/043209	

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Legal Name of Inventor:				
Charles J. Studiner, IV				
Inventor's Signature:	Date:			
	10/29/2014			

DECLARATION AND ASSIGNMENT,		
FOR UTILITY OR	DESIGN	
PATENT APPLICATION	(37 CFR § 1.63)	

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I do hereby authorize and request the Commissioner of Patents to issue any and all Letters Patent which may be granted upon any of the said applications, to said 3M Innovative Properties Company, as the assignee of the entire right, title, and interest therein.

Legal Name of Inventor:	
Nicholas B. Manor	
Inventor's Signature:	Date:
Nuchola Manor	10/29/2014

**RECORDED: 12/19/2014**